

ABSTRACT

A fuel injector for a gas turbine engine includes a bulkhead having adjacent angled wall segments, each of which includes an injector opening. Fuel injectors are supported by the bulkhead on adjacent wall segments. Each fuel injector includes an inlet fitting including ports for receiving fuel, a feed stem extending through the opening, and a manifold supported at the downstream end of the feed stem and including a plurality of manifold segments. Each manifold segment includes a plurality of nozzles arranged in a linear, planar array; with each nozzle including a fuel distribution assembly and an air swirler assembly. The manifold segments are supported at angles to one another, such that that the sprays from one array of nozzles in one segment are provided in a different direction than the sprays from another array of nozzles in an adjacent manifold segment.